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VANM212.001AUS PATENT

11-24-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Remacle, et al.	Group Art Unit 1645
Appl. No.	:	09/816,763	
Filed	:	March 23, 2001	
For	:	METHOD AND KIT FOR THE SCREENING, THE DETECTION AND/OR THE QUANTIFICATION OF TRANSCRIPTIONAL FACTORS	
Examiner	:	Unknown	

SUPPLEMENTAL PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to examination on the merits of the above-referenced application, please amend the specification as follows:

IN THE SPECIFICATION

Please replace the paragraph beginning on page 6, line 19 with the following rewritten paragraph:

a'

The following method according to the invention may also be used for the screening, detection and/or quantification of proteins which bind to specific double stranded DNA. One such protein is the HIV integrase which recognises the sequence 5'-GTGTGGAAAATCTCTAGCA-3' (SEQ ID NO:132) with a possible GT at the 3' end which is cut by the enzyme. The enzyme can be stabilised in its binding form using specific experimental conditions mainly the presence of Me++ (Yi et al. Biochemistry 38, 8458, 1999). Other viral

Cont a1

proteins binding to DNA sequence are listed in table 1 and are also possibly detected by the present invention.

Please replace the paragraph beginning on page 20, line 23 with the following rewritten paragraph:

a2

The spacer double strand nucleotide sequences were constructed from the following CMV sequence:

5'TGGCCAAGCGGCCTCTGATAACCAAGCCTGAGGTTATCAGTGTAATGAAGCGCCG
CATTGAGGAGATCTGCATGAAGGTCTTTGCCCAGTACATTCTGGGGGCCGATCCTCT
GAGAGTCTGCTCTCCTAGTGTGGATGACCTACGGGCCATCGCCGAGGAGTCAGATG
AGGAAGAGGCTATTGTAGCCTACACTTTGGCCACCGCTGGTGTCAGCTCCTCTGATT
CTCTGGTGTCACCCCCAGAGTCCCCTGTAC (SEQ ID NO:146) acting as a spacer was linked to a) the NFκB consensus oligonucleotide 5'AGTTGAGGGGACTTTCCCAGGC-3' (SEQ ID NO:147) b) the CREB consensus oligonucleotide 5'ATTGCCTGACGTCAGAGAGCTAG-3' (SEQ ID NO:148) and c) the AP-1 consensus oligonucleotide 5'CCGTTCCGGCTGACTCATCAAGCG-3' (SEQ ID NO:149). In the example the spacer was of 100 based pairs. The CMV extremity is 5' biotinylated, so that these probes can be linked to streptavidin-coated 96-wells plates : 2 pmoles of probes per well are incubated 1h at 37 °C in 50 µl 10 mM phosphate buffer 150 mM NaCl (hereafter called PBS_{150}). Plates are then washed and the amount of DNA fixed on streptavidin-coated plates was quantified using the picogreen assay (Molecular Probes, OR, USA). One picomole of DNA was found to be fixed on the wells using DNA standard for calibration of the assay.

Please replace the paragraph at line 2 on page 31 with the following rewritten paragraph:

a3

LyF-1 YYTGGGAGR (SEQ ID NO:66)

Please replace the paragraph on page 31, at line 12 with the following rewritten paragraph:

a4

Myc TCTCTTA (SEQ ID NO:150)

Please replace the paragraph on page 31, at line 28 with the following rewritten paragraph:

a5

Oct-6 ATGCAAAT (SEQ ID NO:91)

Please replace the paragraph on page 31, at line 30 with the following rewritten paragraph:

a6

P53 RRRC(A/T)(T/A)GYYY$(N)_{0-13}$RRRC(A/T)(T/A)GYYY (SEQ ID NO:92); (SEQ ID NO:133 - SEQ ID NO:145)

Please replace the paragraphs on page 33, lines 5 through 23, with the following rewritten paragraphs:

a7

Virus EBNA
(B958 strain)
Epstein-Barr
T TAG CAA TG (SEQ ID NO:127)
Virus BZLF
(B958 strain)
Human CBF-1 CGTGGGAA (EpsteinBarr Virus cis-element) (SEQ ID NO:128)
Human Papilloma A CCG AAA ACG GTG T (SEQ ID NO:129)
Herpes Simplex
ATG CTA ATG ATA (SEQ ID NO:130)
Virus Type 1 VP16
HIV TAT GGG TCT CTC TGG TTA GAC CAG
ATC TGA GCC TGG GAG CTC TCT
GGC TAA CTA GGG AAC CCA
(SEQ ID NO:131)
(TAR RNA SEQUENCE)
HIV Integrase GTGTGGAAAATCTCTAGCA (SEQ ID NO:132)

IN THE SEQUENCE LISTING:

Please add the accompanying Sequence Listing to the application.

REMARKS

The application has been amended to incorporate the nucleic acid sequences recited in the specification into a Sequence Listing as required by 37 C.F.R. §1.821-1.825.

The specification has been amended to provide SEQ ID NOs. for sequences on pages 6, 20, and 31.

In addition, the specification has been amended to provide the consensus binding site for the transcription factor Lyf-1 which is known to those skilled in the art. In particular, the specification recited the binding site as "PPTGGGAGR" (SEQ ID NO:66). However, as known to those skilled in the art, the consensus binding site for Lyf-1 is "YYTGGGAGR." For example, the attached abstract from a 1991 journal article (Lo, K. et al. 1991. "Lyf-1, a transcriptional regulator that interacts with a novel cl promoters for lymphocyte-specific genes." *Mol Cell Bio.* Oct; 11(10): 5229-5243) demonstrates that at the time the present application was filed those skilled in the art knew that the consensus binding site for Lyf-1 was "PyPyTGGAGPu" (YYTGGGAGR using the abbreviations governing Sequence Listings). Therefore, the amendment of the sequence to "YYTGGGAGR" introduces no new matter into the specification as filed.

The sequence for "P53" on page 31, recites the sequence as "RRRC(A/T)(T/A)GYYY$(N)_{0\text{-}13}$RRRC(A/T)(T/A)GYYY". Due to the variable number of N's in the sequence, each possibility was assigned a separate SEQ ID NO in the present amendment.

The changes made to the specification by the current amendment, including insertions and **[deletions]**, are shown on an attached sheet entitled **VERSION WITH MARKINGS TO SHOW CHANGES MADE**, which follows the signature page of this amendment. No new matter has been added herewith.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: Sept. 21, 2001

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